

PROCEEDINGS
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TWO NEW SPECIES OF HELIOPSIS (ASTERACEAE)
FROM SOUTH AMERICA.

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The two new species of *Heliopsis* here described have been held in manuscript for several years. A note identifying a species of this genus wrongly described by Klatt as a *Gymnolomia* is appended.

***Heliopsis lanceolata* Blake, sp. nov.**

Herba perennis erecta v. adscendens; caulis tenuis bifariam pilosus; folia opposita remota anguste lanceolata longe acuminata basi acute cuneata petiolata triplinervia calloso-serrulata utrinque dense subappresso-hirsutula; capitula majuscula radiata terminalia solitaria longe pedunculata; involucri 6-8 mm. alti phyllaria oblonga herbacea calloso-apiculata dense pilosiuscula; achenia disci parva oblonga quadrangularia apice truncata non striata.

Erect or ascending perennial herb, single-stemmed, with a few short leafy branches from the base; stem subterete, striate, 1.5-3 mm. thick, purplish or purplish brown, densely gray-pilose with matted hairs in two lines and sparsely pilose or nearly glabrous elsewhere, glabrescent below, bifurcate or few-branched, with erect branches; internodes 2.5-10 cm. long; leaves often with short leafy branches in their axils; petioles slender, unmarginated, 1-2 cm. long, sulcate above, densely pubescent in the sulcus; blades narrowly lanceolate, 4.8-8.5 cm. long, 6-16 mm. wide, callous-serrulate chiefly above the base and below the apex (teeth acute or acutish, 0.3-1 mm. high, 3-10 mm. apart) or the smaller subtire, firm-papery, about equally green on both sides, densely subappressed-hirsutulous on both sides and with some longer hairs especially along the margin and the chief veins beneath, the bases of the hairs sometimes glanduliform; peduncles solitary at tips of stems and branches, slender, 14-22 cm. long, pubescent like the stem below, above densely subtomentose-pilose with spreading or erectish ochroleucous hairs; heads 2.8-5 cm. wide (as pressed); disk 1-(fruit) 1.5 cm. high, 1.2-1.5 cm. thick; involucre 2-seriate, ob-graduate, appressed, the outer phyllaries unequal, oblong or oblong-ob lanceolate, acute or acutish, conspicuously callous-tipped, herbaceous,

densely pilosulous with ochroleucous hairs, the inner phyllaries shorter, oblong, acute or acuminate, thinner, subchartaceous, glabrous or slightly puberulous; rays about 14-18, golden yellow, fertile, the lamina oblong, bluntly 2-3-denticulate, about 14-nerved, sessile, persistent, puberulous at base, glabrous on back, 19-23 mm. long, about 6 mm. wide; disk corollas yellow, glabrous or subglabrous, 4.4 mm. long (tube 0.7 mm., throat slenderly subcylindric, 3 mm., teeth ovate, acutish, recurving, 0.7 mm. long); pales lance-oblong, obtuse or acute, essentially glabrous, narrowly keeled, 3-vittate, thickened toward apex, brownish yellow above, 6 mm. long; ray achenes (submature) obovoid, trigonous, about 1-nerved on each face or nerveless, sparsely hispidulous above chiefly on the angles, 3 mm. long, 1.5 mm. wide; disk achenes oblong, bluntly quadrangular, nerveless or weakly 1-nerved on the faces, dull, glabrous, truncate at the obscurely crenulate apex, 2.5 mm. long, 1-1.2 mm. wide.

COLOMBIA: Open rocky hillsides, vicinity of Vetas, Dept. Santander, Eastern Cordillera, alt. 3100-3250 m., 16-20 Jan. 1927, *E. P. Killip & A. C. Smith* 17339 (type no. 1,352,958, U. S. Nat. Herb.); in thicket, same locality and date, *Killip & Smith* 17905.

A species of the *Heliopsis bupthalmoides* group, readily distinguished by its narrowly lanceolate acuminate leaves.

***Heliopsis decumbens* Blake, sp. nov.**

Herba perennis rhizomatosa decumbens 8-10 cm. alta; caules pauci breves patenter pilosi; folia opposita paucijuga elliptico-oblonga v. elliptico-ovata obtusa basi cuneata petiolata crenato-serrata triplinervia praecipue infra patenti-hirsuta; capitula mediocria solitaria longe pedunculata aurea radiata; involucri 2-seriata ca. 8 mm. alti obgraduati phyllaria exteriora oblonga v. oblongo-obovata obtusa 3-nervia herbacea pilosa; radii ca. 15 aurei ca. 12 mm. longi; achenia disci obovoidea paucinervia truncata epapposa.

Low herb, with prostrate branching rhizome (up to 10 cm. long or more), short decumbent stems, and relatively long ascending or erectish terminal peduncles; leafy part of stem about 2.5-4 cm. long, subterete, striate or sulcate, greenish, more or less densely pilose with spreading or partly subappressed hairs sometimes arranged more or less in lines, in age glabrate or glabrescent; internodes 5-10 mm. long; leaves in about 4 pairs; petioles rather broad, more or less pilose, 5-7 mm. long, obscurely margined essentially to base, connate at base; blades 2.5-3.5 cm. long, 1-1.5 cm. wide, obtuse, bluntly and obscurely callous-apiculate, at base cuneately decurrent into the petiole, crenate-serrate chiefly above the cuneate lower part (teeth about 5-7 pairs, about 0.3 mm. high, mostly 2-3 mm. apart, obtuse or acutish, callous-tipped), above glabrous or sparsely short-hirsute, sparsely or rather densely hirsute or hirsutulous on margin, beneath hirsute on chief veins and sometimes sparsely so on smaller veins and surface; peduncle slender, pilose with spreading or upcurved hairs, densely so below the head, 4-7 cm. long; head 3 cm. wide; disk about 1.3 cm. wide, 8-10 mm. high (as pressed); involucre hemispheric, 7-9 mm. high, appressed, 2-seriate, the outer phyllaries about 7, oblong or obovate-oblong, obtuse, obscurely

callous-tipped, sparsely to rather densely pilose with spreading to erectish hairs, herbaceous, somewhat paler and subindurated toward base, the inner series 1–2 mm. shorter, thinner, paler, obtuse or abruptly short-acute, less pubescent or nearly glabrous; receptacle (in flower) short-conical; rays fertile, the corolla apparently golden yellow, sessile on the achene, oblong, tridenticulate, 11–14-nerved, hispidulous at base, 11–13 mm. long, 3 mm. wide; disk corollas yellow, glabrous, 4.6 mm. long (tube 0.7 mm., throat cylindric-funnelform, 3.2 mm., teeth ovate, 0.7 mm. long); pales scarious, obtuse or acute, narrowly carinate, 3-nerved, 6 mm. long; ray achenes obovoid-trigonal, glabrous, epappose, 3 mm. long, 1.5 mm. wide, 1–3-nerved on each face, with narrow whitish irregularly undulate margin; disk achenes obovoid, compressed, thickened, about 3-nerved on each side, blackish, glabrous, epappose, truncate at apex, 2.7 mm. long, 1.3 mm. wide.

PERU: Cajamarca, 30 April 1912, *W. H. Osgood & M. P. Anderson* 35 (type no. 346721, Field Museum).

Somewhat similar in appearance to the Mexican *Heliopsis procumbens* Hemsl.

HELIOPSIS BUPHTHALMOIDES (Jacq.) Dunal, Mem. Mus. Paris 5 : 57. 1819.

Anthemis buphthalmoides Jacq. Hort. Schoenbr. 2 : 13. pl. 151. 1797.

Gymnolomia silvatica Klatt, Leopoldina 25 : 104. 1889.

Gymnolomia silvatica Klatt is represented in the Gray Herbarium by a sketch of the type (*Carl Hoffmann* 153, Costa Rica, in silva montis Irazu) in the Berlin Herbarium, accompanied by a pocket containing flowers, pales, and achenes. Examination of this material shows that Klatt's species is identical with the common and widespread tropical American *Heliopsis buphthalmoides* (Jacq.) Dunal. Klatt described the leaves as ovate-lanceolate, 3 inches long, 9 lines wide, but the leaf blades are represented in his careful sketch as ovate, 7–8.5 cm. long, 3–3.8 cm. wide. Klatt's species was referred to *Heliopsis* by Robinson and Greenman¹ in their revision of *Gymnolomia*, but has not previously been synonymized specifically.

¹ Proc. Boston Soc. Nat. Hist. 29 : 104. 1899